

Lesson Plan: Fingerprinting

Area: Forensic Science

Age Group: 2nd Grade – 3rd Grade

Supplies Needed:

- #2 pencils
- Clear tape
- Cards with blank hands for kids to etch their fingerprints (attached to this lesson plan)
- Scratch paper
- Photographs, and supplemental teaching supplies for background information

Introduction:

- Ask kids: do you know what fingerprints are? (Show photographs of fingerprints)
- Fingerprints are _____ (ask kids to complete the sentence)
- Do you know why fingerprints are useful?
- Fingerprints are unique from person to person, and everyone has different fingerprints.
- Useful for crime scenes, etc. Have helped governments worldwide identify criminals for more than 100 years. Other visible human characteristics change, but your fingerprints stay the same.

Demonstration:

- Draw a hand on the piece of paper, or ask a friend to trace the outline of hand
- Take the #2 pencil, sketch a dark blot on the scratch paper
- Run a finger on the blot, and smear so the finger is dark with pencil markings
- Take a piece of clear tape, and press the sticky side onto the finger
- Quickly peel off the tape
- Put the piece of tape onto a card printed with a hand, match tape to the appropriate finger

Directions:

- Provide each kid with a #2 pencil, a sheet of prepared paper, and some clear tape.
- Ask them to make fingerprints for each finger of one of their hands!
- So, in the end their card has the patterns of their fingerprints on it.
- They can take the card home!
- After kids complete their cards, ask them to compare their fingerprint patterns with that of their classmates. Ask them: how are they different and/or similar? Does someone else have a fingerprint that is exactly the same as yours? Do *you* even have the same pattern among your fingers?
- Ask the kids to note if they have loops, whorls, arches or a combination. Also note any distinctive features.

Follow-up:

- Can anyone tell us what new things you guys learned in this past hour?
- (time allowing) Play detective, show a mystery set of fingerprints made by one of the two mentors. Allow the kids to see identified copies of both mentor's fingerprints, ask the kids to decide who made the set of mystery fingerprints.

Supplemental teaching material: Visual aids

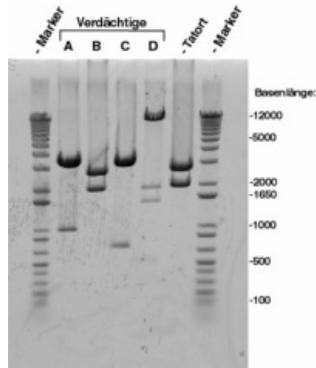
Pictures of fingerprints (each photograph will be printed out on a full sheet of paper):



A fingerprint



A fingerprint-recognizing device



DNA fingerprinting (a different type of identity-recognition) - briefly mention.



Whorl

Loop

Arch

Different human fingerprint patterns.

Prepared paper for kids to tape their fingerprints onto:
(Make one copy for each kid)

My Fingerprints!

